

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022064**Date Inspected:** 16-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Qiu Wen.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG components.**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS)

Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA Inspector observed and/or found the following:

Bay 14:

This QA Inspector observed the following work in progress:

OBG Seg 13AW:

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3013AA-017 [Floor Beam (FB) to RS stiffener of Edge Plate (EP) sub-assembly, fillet weld; at Panel Point (PP) 118.35]. The welder is identified as 037748 and was observed welding in the 4F position. ZPMC QC was identified as Li Ping. The welding variables recorded by QC appeared to comply with Welding Procedure Specification (WPS): B-P-2114-FCM-1.

OBG Seg 13CW:

The SMAW process on weld joint no: SEG3015H-267 [FB to RS stiffener on Side Panel (SP) 3112, complete joint penetration (CJP) weld; at PP123]. The welder is identified as 067610 and was observed welding in the 4G position. ZPMC QC was identified as Sun Tian Ling. The welding variables recorded by QC appeared to comply

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

with WPS: B-P-2214.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3015B-271 [Vertical Plate (VP) to SP, CJP weld; at PP122.5 to 124.5]. The welders are identified as 067876, 066734, 066439 and 068924 and were observed welding in the 2G position. ZPMC QC was identified as Zhang Ling. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

It was also observed that a backing bar was tack welded with VP3013 at PP121.5 to 122, due to excess of root gap. See attached photo for further details.

Repair welding of weld joint no: DP3148-001-248 and 251 [Deck Panel (DP) to DP diaphragm, CJP weld]. The welders are identified as 045209 and 045240 and were observed welding in the 2G position. Welding process was identified as FCAW. ABF QA was identified as Liu Tao. The welding variables appeared to comply with WPS: 345-FCAW-2G(2F)-ESAB-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR 2416 Rev-0 and B-CWR-2417 Rev-0, for the respective welds.

Repair welding of weld joint no: SEG3015B-175 (FB to I-rib stiffener, CJP weld, at PP124.5). The welder is identified as 066258 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Zhang Ling. The welding variables appeared to comply with WPS: 345-SMAW-3G(3F)-Repair. Repair welding was done as per Welding Repair Report (WRR): B-18828 Rev-0.

During random inprocess visual inspection, this QA inspector observed that the cope holes of FB3236 and FB3224 are mis-aligned by approx 30mm. Also the root gap at weld joint nos: SEG3015H-205, 200 and 203 was observed to be approximately 15mm. Backing bar was seen to be tack welded to these welds. This QA Inspector discussed this issue with ZPMC QC identified as Sun Tian Ling to weld this joint after Engineers approval for this excess root gap. See attached photos for further details.

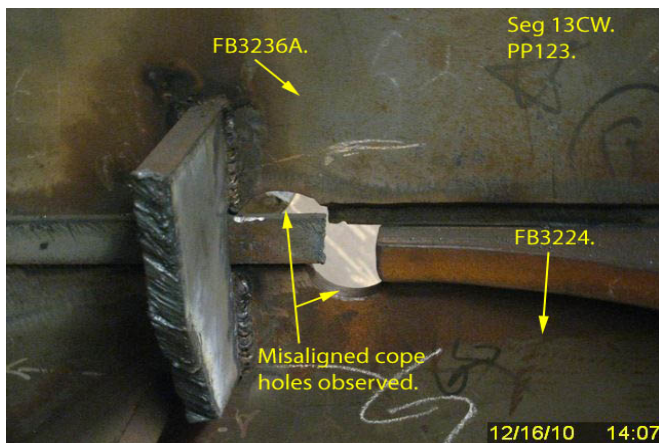
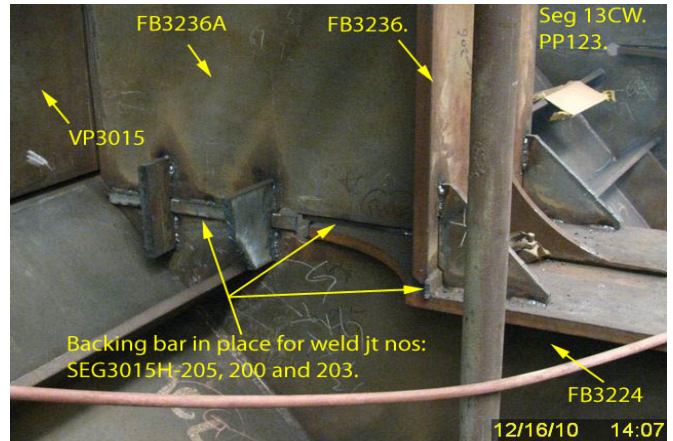
OBG Seg 14W:

This QA Inspector observed ZPMC personnel performing fit-up of FB3238, FB3340, FB3332, FB3323 and FB3349 with Longitudinal Diaphragm (LD) 3049B and LD 3048B (from PP 126.5 to PP128). See attached photo for further details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By: Wadkar,Sailesh
Reviewed By: Patterson,Rodney

Quality Assurance Inspector
QA Reviewer